VZCOMPU200/300

April 1984 #4 $1.00

Hello again members,

Welcome to the fourth issue of VZCOMPU200/300, the newsletter for VZ 200 and VZ-300 computers.

This issue has a three page article/project which I promised in issue 2 that changes the VZ 200 keyboard to proper keys. Thanks to D.Boyce, 41 Heather Drive CHRISTIE DOWNS 5164.

I'd thank Bob Kitch and John D'Alton for correcting my mistake in the machine language programs of last month They were ½ Colour Screen and Hi-Res Pixel.

I've added a modification to the MOONLANDER program which appeared in APC April 1984. It is a very good program, but my modification makes it better.....

You may have noticed on this page I've put a "NEWSLETTER LEFT" message on it. It of course, tells you how many of VZCOMPU200/300's you are eligible to have. If it says you have none left, you can pay me for more newsletters.

In the next newsletter (June), the following is expected to be produced- PROGRAMS, VZ 200/300 MEMORY MAP, SOFTWARE REVIEW and others.

Anybody in NSW or other states interested in forming an official VZ group in NSW could contact Charles Fairlie on (02) 888 3200 (business hours). There are a few New South Welshmen (or Welshwomen!) who would be interested. I think there would be a group soon forming in South Australia also.

I would appreciate it if somebody sends in some machine language programs. I would also like projects, programs and tips.

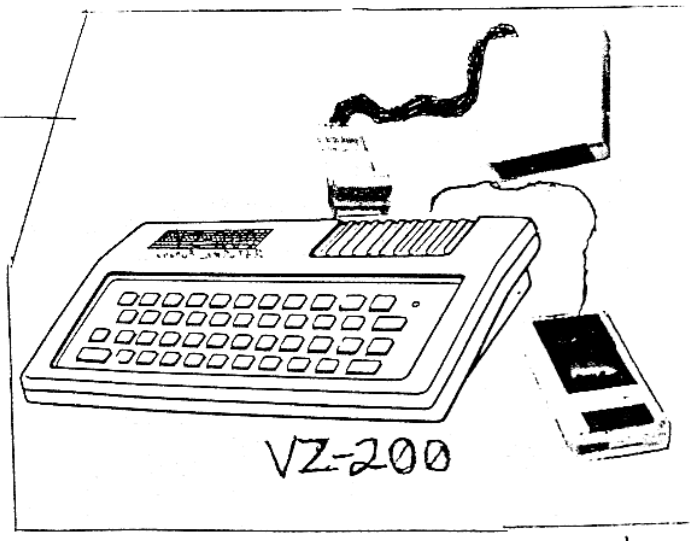
Cherio for now,

Michael Novakovic

VZ-200/300 Computer Club,
24 Albert Street,
GOODNA Qld 4300.

LATE NOTICE

I'm getting a bit more success in writing software. I'm into educational stuff at the moment.



MACHINE LANGUAGE PROGRAMMING

Two machine language programs for the VZ.

COLOUR AND SOUND
By m.Novakovic

This program makes a sound and gives a bit of colour.

```
10 FORI=26624TO26634
20 READA:POKEI,A:NEXT
30 DATA33,9,76,12,1,0,237,176,
5,5,0,22,29,201
40 POKE30862,212:POKE30863,39:
X=USR(0)
```

INVERSE @
By m.Novakovic

This program makes an @= sign on the screen. Every time you type RUN, the sign always appear.

```
10 FORZ=0TO12
20 READD:POKE32000+Z,D
30 NEXT
40 DATA34,0,113,16,2,112,255,7,
54,160,222,177,201
50 POKE30862,0:POKE30863,125:
X=USR(0)
```

E R R A T A

In VZCOMPU200/300 #3, the 2 machine language programs HI RES PIXEL and ¼ COLOUR SCREEN have mistakes concerning data. Here are the corrections-

HI RES PIXEL
Line 40 should be-

```
40DATA33,0,112,17,2,121,54,255,
1,140,237,176,201
```

¼ COLOUR SCREEN
Line10,40 should be-

```
10FORZ=0TO13
40DATA33,0,112,17,1,112,255,7,54,
85,237,176,201
```

Line 45 should be deleted.

FULL LEVEL 2 BASIC ON VZ-300
without extended basic

Since I recieved the VZ-300, I've noticed that some BASIC commands that are only available on other machines appear to work on the VZ-300 with no EXTENDED BASIC software. What I mean appearing to work is that they do not produce any syntax. The commands are DEF and FRE. I noticed the strange occurance in a program for SHARP called "Comet Halley" by N. Cabric. The lines tha puzzle me are 120 and 130 which have DEF FND and DEF FNH. In YC "Mailist" in May 1985 have the FRE command in line 250 (or whatever). That seems to work also. But I don't guarantee they work correctly.

JOYSTICK MODIFICATION FOR "MOONLANDER"
APC Apr 84

Playing the game without the modification is quite hard. Seen that the surfac of the moon is jagged. and is difficult to land safely on the pad with keys, I have given the following modification-

```
520 LT=164:RT=26:BL=106:BR=169:A=INP(43)ANDINP(46)AND31
530 IFA=30ANDFU>0,A=A-32:BL=107:BR=233ELSEA=A+32:GOTO550
555 IFA=27ANDFU>0,B=B-.2:RT=31:POKE50,10:POKE50,11ELSE570
570 IFA=23ANDFU>0,B=B+.2:LT=244:POKE50,10:POKE50,11ELSE585
```

C O N T R O L S

LEFT or RIGHT JOYSTICK
UP= MAIN THRUSTER
LEFT= LEFT AUX. THRUSTER
RIGHT= RIGHT AUX. THRUSTER

S O N G F I L E R by M. Novakovic

REQUIRED-VZ200/300,RECORDER,24K MEMORY AND PRINTER

The first large program to appear in this newsletter, I use it to keep up to 500 files of names of records and compact disks I have. It is a modification a TRS-80 program that appeared in YC last year.

The program has 6 operation modes, CREATE,VIEW,PRINT,SAVE,LOAD,END
To CREATE a file, press 1. You enter in your information into the VZ.
Here is two examples you might have-

NAME-DIRTY WORK	NAME-JOHN DENVER'S TOP CLASSICS
SINGER/S-ROLLING STONES	SINGER/S-JOHN DENVER
MAX.POS. ON CHARTS-4	MAX.POS. ON CHARTS-1
WEEKS ON CHARTS-82	WEEKS ON CHARTS-6
COMPACT DISK/RECORD-RE	COMPACT DISK/RECORD-CD

Then you can VIEW your information by pressing 5. It would look like this-

DIRTY WORK ROLLING STONES 4 82 RE
JOHN DENVER'S TOP CLASSICS JOHN DENVER 1 6 CD

I'd like to thank very much Brian Dwyer for printing my program on his print

---

```
8 CLEAR4000
10 DIMA$(500):DIMS$(500):DIMM$(500):DIMW$(500):DIMC$(500)
12 CLS:PRINT"[illegible]"
13 PRINT"  BY MICHAEL NOVAKOVIC,VZCLUB   "
14 PRINT"    1 CREATE FILE"
15 PRINT"    2  PRINT FILE"
16 PRINT"    3   SAVE FILE"
17 PRINT"    4   LOAD FILE"
19 PRINT"    5   VIEW FILE"
20 PRINT"    6    END FILE"
21 INPUT"WHICH";N
22 IFN=1THEN300
23 IFN=2THEN400
24 IFN=3THEN500
25 IFN=4THEN600
26 IFN=5THEN700
27 IFN=6THEN1000
28 IFN=7THEN1000
300 CLS:PRINT"[illegible]":FORI=1TO999:NEXT
301 PRINT"TO FINISH FILE,TYPE EXIT.RETURN FOR FILE":FORI=P1TO400
302 INPUTN$(I)
303 IFN$(I)="EXIT"THENP1=I:GOTO350
304 INPUT"NAME";A$(I)
305 INPUT"SINGER/S";S$(I)
306 INPUT"MAX. POS. ON CHARTS";M$(I)
307 INPUT"WEEKS ON CHARTS";W$(I)
308 INPUT"[illegible]OMPACT [illegible]ISK/[illegible]CORD";C$(I)
309 NEXT
350 GOTO12
400 CLS:PRINT"[illegible]"
401 PRINT"IS PRINTER PLUGGED IN";:INPUTPYN$
402 IFPYN$="N"THENGOTO12
403 IFPYN$="Y"THENGOTO450
450 CLS:PRINT"FILES PRINTING"
460 LPRINT"ALBUM/SINGLE NAME";A$(I)
461 LPRINT"SINGER/S";S$(I)
462 LPRINT"MAXIMUM POS. ON CHARTS";M$(I)
463 LPRINT"WEEKS ON CHARTS";W$(I)
464 LPRINT"COMPACT DISK/RECORD";C$(I)
470 GOTO12
500 CLS:PRINT"[illegible]"
501 PRINT INPUT"PREPARE RECORDER PRESS RETURN.";E
502 PRINT@416,"SAVING......"
503 PRINT#"VZ-DATA",P1
504 FORI=0TOP1:PRINT#"VZ-DATA",A$(I),S$(I),M$(I),W$(I),C$(I)
505 PRINT@416,"COMPLETE....":NEXT:GOTO12
```

```
600 CLS:PRINT"[illegible]"
601 PRINT:INPUT"PREPARE RECORDER PRESS RETURN.";E
602 PRINTR416,"LOADING....."
 03 INPUT#"VZ-DATA",P1
604 FORI=0TOP1:INPUT#"VZ-DATA",A$(I),S$(I),M$(I),W$(I),C$(I):NEXT
605 PRINTR416,"COMPLETE....":NEXT:GOTO12
700 CLS:PRINT"[illegible]"
701 FORI=0TOP1
702 PRINTA$(I);" ";S$(I);"  ";M$(I);" ";W$(I);" ";C$(I)
703 NEXT
704 INPUT"PRESS 'RETURN' KEY ";X:GOTO12
1000 CLS:PRINT"**************END**************"
1001 END
```

L SALE

16 copies of SONG FILER prog. 0.00¢
VZCOMPU200/300 #1 0.50¢
VZCOMPU200/300 #2 0.50¢
VZCOMPU200/300 #3 $1.00
M/L ARTICLE 0.50¢
VZ-200/300 COMPUTER CLUB,
24 Albert Street, GOODNA
Qld 4300

I'm interested if you have any unpublished software you intend to sell. if you do could you contact me? michael

Hope you enjoyed this edition of VZCOMPU200/300. Michael

Now for Dave Boyce's VZ KEYBOARD MODIFICATION

Thanks Dave.

SOFTWARE NEW

from VZSOFTWAREZ, 39 Agnes St. TOOWONG 4066.

WORD SQUARES

FILE SEARCH

COPY/PROTECT

DISK GUARD

MENU DISK

POKER MACHINE

VZ-200 KEYBOARD MODIFICATION by DAVE BOYCE

Although the VZ-200 has a full size keyboard, the key's themselves leave a lot to be desired.
It is a relatively simple task to add a keyboard (with proper keys) thereby ridding yourself of several problems in one go.
1 - Keywobble. 2 - Lack of feedback. 3 - Double keying.

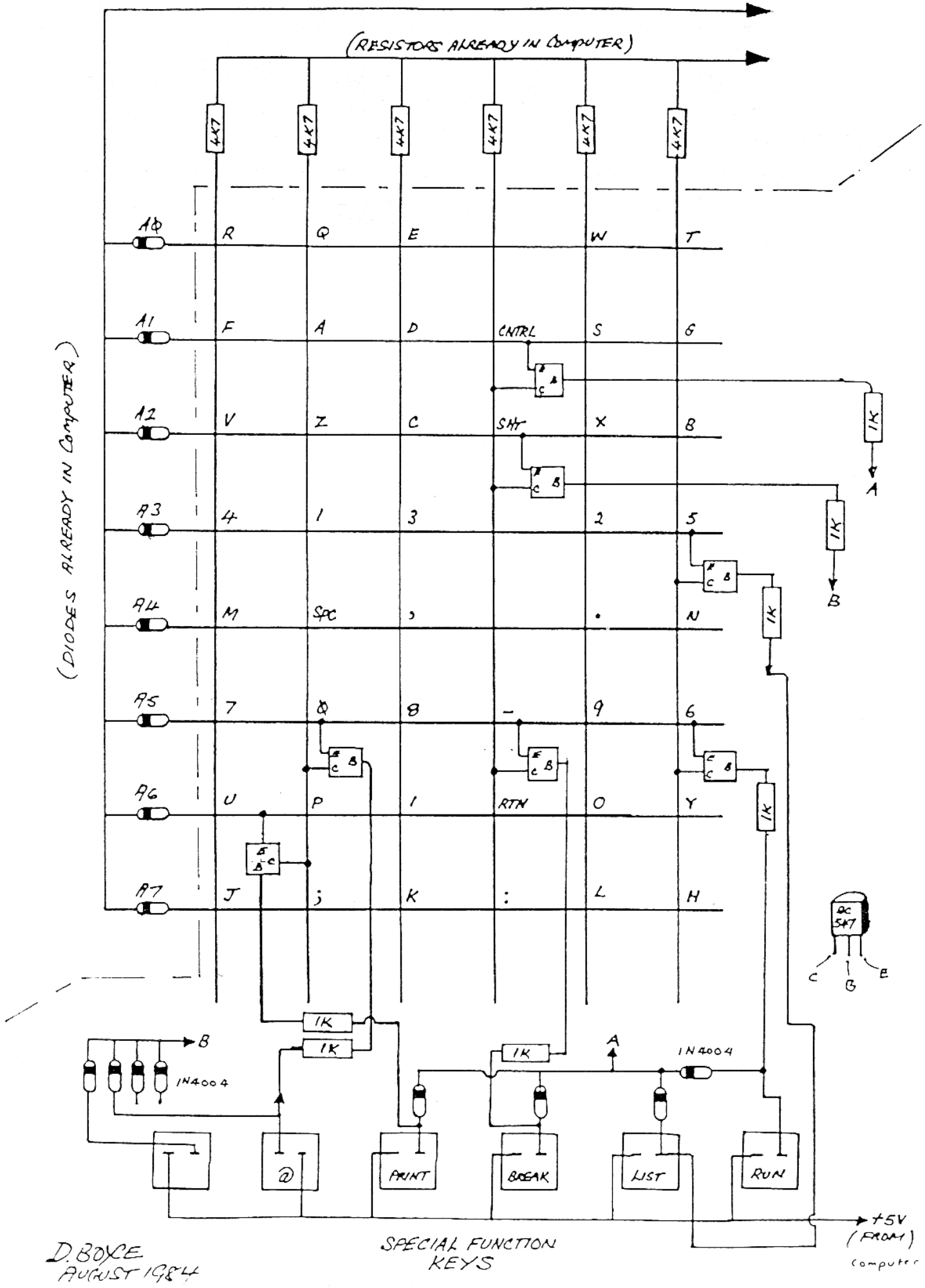
A word of WARNING - attaching a keyboard to your VZ will mean voiding your warranty and you will have to TAKE CARE when attaching wires (maybe ribbon type) inside at the Keyboard cable connection to the Printed Circuit Board (P.C.B.)

I employed a Plug and Sockett arrangment with the Sockett being installed where the Power Switch used to live.
I'm using 15 Way DB Plugs and Sockets. 14 wires for the actual Address and Data lines and 1 for a 5 Volt line for the Special Function Keys. See diagram.
The keyboard that I used came originally from Altronics, they do not carry these any more but the same keyboard maybe bought from Dick Smiths. (latest price $29.95).
the keys that are 'left over' can be used as S.F.keys such as PRINT, LIST, BREAK, @ Symbol, BACKSPACE, RUN etc.
Also now possible are TWO SHIFT keys and a FULL SIZE SPACE-BAR.

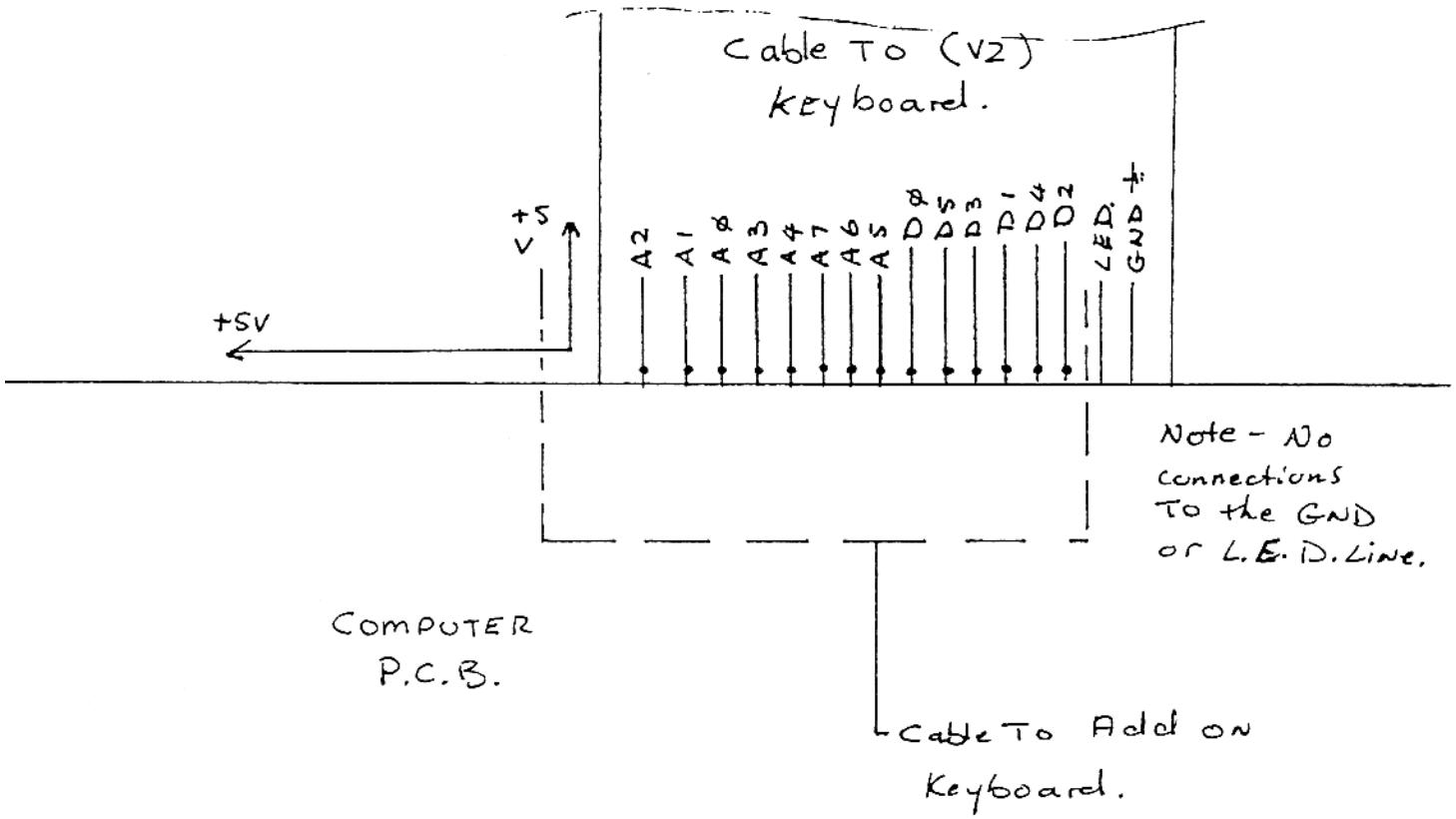
CONSTRUCTION

Whilst the actual wiring is straight forward enough, it is time consuming and tedious and is not recommended if you don't like fishing.
The thing that needs most care is attention to the position of each key in relation to the matrix (see diagram).
Make sure that you come off the correct place in the computer i.e. make your connections at the circuit board end and not the keyboard end of the cable. Take all precautions, especially if a beginner. When soldering to the various points it is wise to heat your iron then switch off before soldering each point. Be sure to check for bridges and any dry joints.
After wiring up, and, before plugging in your NEW Keyboard, ENSURE that the Computer is working correctly. Both keyboards will work together.
Do not make the cable to the new keyboard to long. A toggle switch can be wired in parralel with the SHIFT key, this then acts as a SHIFT LOCK, very handy when using the Word Processor.
Refer to the diagram for Wire Designation and Orientation. Although the GND wire does not go to the keyboard it is easily found for wire orientation.
Incidentally, a word of caution, IF YOU have the Slightest Doubt as to your ability to cope, THEN DON'T, because the RISK and RESONSIBILITY is alls Yours.

The Keyboard modification works - and works well - just takes time.
This article originally appeared in
JOHN WATER'S VE ZEE NEWS No 4. OCT '84.

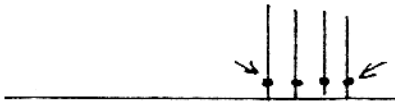

(RESISTORS ALREADY IN COMPUTER)
(DIODES ALREADY IN COMPUTER)
4K7
A0
A1
A2
A3
A4
A5
A6
A7
R Q E W T
F A D CNTRL S G
V Z C SHT X B
4 1 3 2 5
M SPC , . N
7 0 8 - 9 6
U P I RTN O Y
J ; K : L H
1K
A
B
BC 547
C B E
1N4004
@
PRINT
BREAK
LIST
RUN
+5V (FROM computer)
SPECIAL FUNCTION KEYS
D. BOYCE
AUGUST 1984

UNDER SIDE VIEW of P.C.B.
SHOWING connections for Add-ON
Keyboard.



The +V5 Line can be picked up from anywhere CONVENIENT — E.g. The Regulator, or the +5V pin on one of the Buss Connectors.

D0 TO D5 — 6 wires
A0 TO A7 — 8 wires
+5V ——— 1 wire



Indicates where external wires connect for the New Keyboard.